## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

Claim 1 cancelled

- 2. (Currently Amended) A composition comprising the compound of claim 4 <u>59</u> and a pharmaceutically acceptable carrier.
- 3. (Withdrawn) A method for treating or reducing inflammation, pain or fever in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
- 4. (Withdrawn) A method for treating a gastrointestinal disorder, or improving the gastrointestinal properties of a COX-2 inhibitor in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
- 5. (Withdrawn) The method of claim 4, wherein the gastrointestinal disorder is an inflammatory bowel disease, Crohn's disease, gastritis, irritable bowel syndrome, ulcerative colitis, a peptic ulcer, a stress ulcer, a bleeding ulcer, gastric hyperacidity, dyspepsia, gastroparesis, Zollinger-Ellison syndrome, gastroesophageal reflux disease, a bacterial infection, short-bowel (anastomosis) syndrome, or a hypersecretory state associated with systemic mastocytosis or basophilic leukemia and hyperhistaminemia
- 6. (Withdrawn) A method for facilitating wound healing in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
  - 7. (Withdrawn) The method of claim 6, wherein the wound is an ulcer.
- 8. (Withdrawn) A method for treating or reversing renal and/or respiratory toxicity in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
- 9. (Withdrawn) A method for treating a disorder resulting from elevated levels of COX-2 in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.

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- 10. (Withdrawn) The method of claim 9, wherein the disorder resulting from elevated levels of COX-2 is angiogenesis, arthritis, asthma, bronchitis, menstrual cramps, premature labor, tendinitis, bursitis, a skin-related condition, neoplasia, an inflammatory process in a disease, an ophthalmic disorder, pulmonary inflammation, a central nervous system disorder, allergic rhinitis, respiratory distress syndrome, endotoxin shock syndrome, atherosclerosis, a microbial infection, a cardiovascular disorder, a urinary disorder, a urological disorder, endothelial dysfunction, organ deterioration, tissue deterioration, or activation, adhesion and infiltration of neutrophils at the site of inflammation.
- 11. (Withdrawn) The method of claim 10, wherein the neoplasia is a brain cancer, a bone cancer, an epithelial cell-derived neoplasia (epithelial carcinoma), a basal cell carcinoma, an adenocarcinoma, a gastrointestinal cancer, a lip cancer, a mouth cancer, an esophageal cancer, a small bowel cancer, a stomach cancer, a colon cancer, a liver cancer, a bladder cancer, a pancreas cancer, an ovary cancer, a cervical cancer, a lung cancer, a breast cancer, a skin cancer, a squamus cell cancer, a basal cell cancer, a prostate cancer, a renal cell carcinoma, a cancerous tumor, a growth, a polyp, an adenomatous polyp, a familial adenomatous polyposis or a fibrosis resulting from radiation therapy.
- 12. (Withdrawn) The method of claim 10, wherein the central nervous system disorder is cortical dementia, Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, senile dementia, or central nervous system damage resulting from stroke, ischemia or trauma.
- 13. (Withdrawn) A method for inhibiting platelet aggregation in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
- 14. (Original) The composition of claim 2, further comprising at least one therapeutic agent.
- 15. (Original) The composition of claim 14, wherein the therapeutic agent is a steroid, a nonsteroidal antiinflammatory compound, a 5-lipoxygenase (5-LO) inhibitor, a leukotriene B<sub>4</sub> receptor antagonist, a leukotriene A<sub>4</sub> hydrolase inhibitor, a 5-HT agonist, a 3-hydroxy-3-methylglutaryl coenzyme A inhibitor, a H<sub>2</sub> antagonist, an antineoplastic agent, an antiplatelet

agent, a thrombin inhibitor, a thromboxane inhibitor, a decongestant, a diuretic, a sedating or non-sedating anti-histamine, an inducible nitric oxide synthase inhibitor, an opioid, an analgesic, a *Helicobacter pylori* inhibitor, a proton pump inhibitor, an isoprostane inhibitor, or a mixture of two or more thereof.

- 16. (Original) The composition of claim 15, wherein the nonsteroidal antiinflammatory compound is acetaminophen, aspirin, diclofenac, ibuprofen, ketoprofen or naproxen.
- 17. (Withdrawn) A method for treating or reducing inflammation, pain or fever in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.
- 18. (Withdrawn) A method for treating a gastrointestinal disorder, or improving the gastrointestinal properties of a COX-2 inhibitor in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.
- 19. (Withdrawn) The method of claim 18, wherein the gastrointestinal disorder is an inflammatory bowel disease, Crohn's disease, gastritis, irritable bowel syndrome, ulcerative colitis, a peptic ulcer, a stress ulcer, a bleeding ulcer, gastric hyperacidity, dyspepsia, gastroparesis, Zollinger-Ellison syndrome, gastroesophageal reflux disease, a bacterial infection, short-bowel (anastomosis) syndrome, or a hypersecretory state associated with systemic mastocytosis or basophilic leukemia and hyperhistaminemia.
- 20. (Withdrawn) A method for facilitating wound healing in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.
  - 21. (Withdrawn) The method of claim 20, wherein the wound is an ulcer.
- 22. (Withdrawn) A method for treating or reversing renal and/or respiratory toxicity in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.
- 23. (Withdrawn) A method for treating a disorder resulting from elevated levels of COX-2 in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.

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- 24. (Withdrawn) The method of claim 23, wherein the disorder resulting from elevated levels of COX-2 is angiogenesis, arthritis, asthma, bronchitis, menstrual cramps, premature labor, tendinitis, bursitis, a skin-related condition, neoplasia, an inflammatory process in a disease, an ophthalmic disorder, pulmonary inflammation, a central nervous system disorder, allergic rhinitis, respiratory distress syndrome, endotoxin shock syndrome, atherosclerosis, a microbial infection, a cardiovascular disorder, a urinary disorder, a urological disorder, endothelial dysfunction, organ deterioration, tissue deterioration, or activation, adhesion and infiltration of neutrophils at the site of inflammation.
- 25. (Withdrawn) The method of claim 24, wherein the neoplasia is a brain cancer, a bone cancer, an epithelial cell-derived neoplasia (epithelial carcinoma), a basal cell carcinoma, an adenocarcinoma, a gastrointestinal cancer, a lip cancer, a mouth cancer, an esophageal cancer, a small bowel cancer, a stomach cancer, a colon cancer, a liver cancer, a bladder cancer, a pancreas cancer, an ovary cancer, a cervical cancer, a lung cancer, a breast cancer, a skin cancer, a squamus cell cancer, a basal cell cancer, a prostate cancer, a renal cell carcinoma, a cancerous tumor, a growth, a polyp, an adenomatous polyp, a familial adenomatous polyposis or a fibrosis resulting from radiation therapy.
- 26. (Withdrawn) The method of claim 24, wherein the central nervous system disorder is cortical dementia, Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, senile dementia, or central nervous system damage resulting from stroke, ischemia or trauma.
- 27. (Withdrawn) A method for inhibiting platelet aggregation in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 14.
- 28. (Currently Amended) A composition comprising at least one compound of claim 1 59 and at least one compound that donates, transfers or releases nitric oxide, or induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase.
- 29. (Original) The composition of claim 28, further comprising a pharmaceutically acceptable carrier.

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- 30. (Original) The composition of claim 28, wherein the compound that donates, transfers, or releases nitric oxide, or induces the production of endogenous nitric oxide or endothelium-derived relaxing factor or is a substrate for nitric oxide synthase is an S-nitrosothiol.
- 31. (Original) The composition of claim 30, wherein the S-nitrosothiol is S-nitroso-N-acetylcysteine, S-nitroso-captopril, S-nitroso-N-acetylpenicillamine, S-nitroso-homocysteine, S-nitroso-cysteine, S-nitroso-glutathione, or S-nitroso-cysteinyl-glycine.
  - 32. (Currently Amended) The composition of claim 30, wherein the S-nitrosothiol is:
  - (i)  $HS(C(R_e)(R_f))_mSNO$ ;
  - (ii)  $ONS(C(R_e)(R_f))_m R_e$ ; or
- (iii)  $H_2N-CH(CO_2H)-(CH_2)_m-C(O)NH-CH(CH_2SNO)-C(O)NH-CH_2-CO_2H;$ wherein m is an integer from 2 to 20; Re and Rf are each independently a hydrogen, an alkyl, a cycloalkoxy, a halogen, a hydroxy, an hydroxyalkyl, an alkoxyalkyl, an arylheterocyclic ring, - a cycloalkylalkyl, a heterocyclicalkyl, an alkoxy, a haloalkoxy, an amino, an alkylamino, a dialkylamino, an arylamino, a diarylamino, an alkylarylamino, an alkoxyhaloalkyl, a haloalkoxy, a sulfonic acid, a sulfonic ester, an alkylsulfonic acid, an arylsulfonic acid, an arylalkoxy, an alkylthio, an arylthio, a cyano, an aminoalkyl, an aminoaryl, an aryl, an arylalkyl, a carboxamido, a alkylcarboxamido, an arylcarboxamido, an amidyl, a carboxyl, a carbamoyl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarbonyl, an arylcarbonyl, an ester, a carboxylic ester, an alkylcarboxylic ester, an arylcarboxylic ester, a haloalkoxy, a sulfonamido, an alkylsulfonamido, an arylsulfonamido, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfonyl, an arylsulfonyloxy, a urea, a nitro, -T-Q-, or  $-(C(R_g)(R_h))_k$ -T-Q or  $R_e$  and  $R_f$  taken together are an oxo, a thial, a heterocyclic ring, a cycloalkyl group, an oxime, a hydrazone or a bridged cycloalkyl group; Q is -NO or -NO<sub>2</sub>; and T is independently a covalent bond, a carbonyl, an oxygen, -S(O)<sub>0</sub>- or  $-N(R_a)R_{i-}$ , wherein o is an integer from 0 to 2,  $R_a$  is a lone pair of electrons, a hydrogen or an alkyl group; Ri is a hydrogen, an alkyl, an aryl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarboxylic ester, an arylcarboxylic ester, an alkylcarboxamido, an arylcarboxamido, an alkylsulfinyl, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfinyl, an arylsulfonyloxy, an arylsulfonyl, a sulfonamido, a carboxamido, a carboxylic ester, an aminoalkyl, an aminoaryl,

- -CH<sub>2</sub>-C(T-Q)( $R_g$ )( $R_h$ ), or -( $N_2O_2$ -)<sup>-</sup>•M<sup>+</sup>, wherein M<sup>+</sup> is an organic or inorganic cation; with the proviso that when  $R_i$  is -CH<sub>2</sub>-C(T-Q)( $R_g$ )( $R_h$ ) or -( $N_2O_2$ -)•M<sup>+</sup>; then "-T-Q" can be a hydrogen, an alkyl group, an alkoxyalkyl group, an aminoalkyl group, a hydroxy group or an aryl group; and  $R_g$  and  $R_h$  at each occurrence are independently  $R_e$ .
- 33. (Original) The composition of claim 28, wherein the compound that donates, transfers, or releases nitric oxide, or induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase is L-arginine, L-homoarginine, N-hydroxy-L-arginine, nitrosated L-arginine, nitrosated L-arginine, nitrosated L-homoarginine, nitrosylated L-homoarginine, nitrosylated L-homoarginine, citrulline, ornithine, glutamine, lysine, an arginase inhibitor or a nitric oxide mediator.
- 34. (Original) The composition of claim 28, wherein the compound that donates, transfers, or releases nitric oxide, or induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase is:
  - (i) a compound that comprises at least one ON-O- or ON-N- group;
- (ii) a compound that comprises at least one  $O_2N$ -O-,  $O_2N$ -N- or  $O_2N$ -S- or group;
- (iii) a N-oxo-N-nitrosoamine having the formula: R<sup>1</sup>"R<sup>2</sup>"N-N(O-M<sup>+</sup>)-NO, wherein R<sup>1</sup>" and R<sup>2</sup>" are each independently a polypeptide, an amino acid, a sugar, an oligonucleotide, a straight or branched, saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted hydrocarbon, or a heterocyclic group, and M<sup>+</sup> is an organic or inorganic cation.
- 35. (Original) The composition of claim 34, wherein the compound comprising at least one ON-O- or ON-N- group is an ON-O-polypeptide, an ON-N-polypeptide, an ON-O-amino acid, an ON-N-amino acid, an ON-O-sugar, an ON-N-sugar, an ON-O-oligonucleotide, an ON-N-oligonucleotide, a straight or branched, saturated or unsaturated, substituted or unsubstituted, aliphatic or aromatic ON-O-hydrocarbon, a straight or branched, saturated or unsaturated, substituted or unsubstituted, aliphatic or aromatic ON-N-hydrocarbon, an ON-O-heterocyclic compound or an ON-N-heterocyclic compound.

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- 36. (Currently Amended) The composition of claim 34, wherein the compound comprising at least one O<sub>2</sub>N-O-, O<sub>2</sub>N-N- or O<sub>2</sub>N-S- group is an O<sub>2</sub>N-O-polypeptide, an O<sub>2</sub>N-N-polypeptide, an O<sub>2</sub>N-O-amino acid, O<sub>2</sub>N-N-amino acid, O<sub>2</sub>N-S-amino acid, an O<sub>2</sub>N-O-sugar, an O<sub>2</sub>N-N-sugar, O<sub>2</sub>N-S-sugar, an O<sub>2</sub>N-O-oligonucleotide, an O<sub>2</sub>N-N-oligonucleotide, an O<sub>2</sub>N-S-oligonucleotide, a straight or branched, saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted O<sub>2</sub>N-O-hydrocarbon, a straight or branched, saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted O<sub>2</sub>N-N-hydrocarbon, a straight or branched, saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted O<sub>2</sub>N-S-hydrocarbon, an O<sub>2</sub>N-O-heterocyclic compound, an O<sub>2</sub>N-N-heterocyclic compound or an O<sub>2</sub>N-S-heterocyclic compound.
- 37. (Original) The composition of claim 28, further comprising at least one therapeutic agent.
- 38. (Original) The composition of claim 37, wherein the therapeutic agent is a steroid, a nonsteroidal antiinflammatory compound, a 5-lipoxygenase (5-LO) inhibitor, a leukotriene B<sub>4</sub> receptor antagonist, a leukotriene A<sub>4</sub> hydrolase inhibitor, a 5-HT agonist, a HMG CoA inhibitor, a H<sub>2</sub> antagonist, an antineoplastic agent, an antiplatelet agent, a thrombin inhibitor, a thromboxane inhibitor, a decongestant, a diuretic, a sedating or non-sedating anti-histamine, an inducible nitric oxide synthase inhibitor, an opioid, an analgesic, a *Helicobacter pylori* inhibitor, a proton pump inhibitor, an isoprostane inhibitor, or a mixture of two or more thereof.
- 39. (Original) The composition of claim 38, wherein the nonsteroidal antiinflammatory compound is acetaminophen, aspirin, diclofenac, ibuprofen, ketoprofen or naproxen.
- 40. (Withdrawn) A method for treating or reducing inflammation, pain or fever in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.
- 41. (Withdrawn) A method for treating a gastrointestinal disorder, or improving the gastrointestinal properties of a COX-2 inhibitor in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.

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- 42. (Withdrawn) The method of claim 41, wherein the gastrointestinal disorder is an inflammatory bowel disease, Crohn's disease, gastritis, irritable bowel syndrome, ulcerative colitis, a peptic ulcer, a stress ulcer, a bleeding ulcer, gastric hyperacidity, dyspepsia, gastroparesis, Zollinger-Ellison syndrome, gastroesophageal reflux disease, a bacterial infection, short-bowel (anastomosis) syndrome, or a hypersecretory state associated with systemic mastocytosis or basophilic leukemia and hyperhistaminemia.
- 43. (Withdrawn) A method for facilitating wound healing in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.
  - 44. (Withdrawn) The method of claim 43, wherein the wound is an ulcer.
- 45. (Withdrawn) A method for treating or reversing renal and/or respiratory toxicity in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.
- 46. (Withdrawn) A method for treating a disorder resulting from elevated levels of COX-2 in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.
- 47. (Withdrawn) The method of claim 46, wherein the disorder resulting from elevated levels of COX-2 is angiogenesis, arthritis, asthma, bronchitis, menstrual cramps, premature labor, tendinitis, bursitis, a skin-related condition, neoplasia, an inflammatory process in a disease, an ophthalmic disorder, pulmonary inflammation, a central nervous system disorder, allergic rhinitis, respiratory distress syndrome, endotoxin shock syndrome, atherosclerosis, a microbial infection, a cardiovascular disorder, a urinary disorder, a urological disorder, endothelial dysfunction, organ deterioration, tissue deterioration, or activation, adhesion and infiltration of neutrophils at the site of inflammation.
- 48. (Withdrawn) The method of claim 47, wherein the neoplasia is a brain cancer, a bone cancer, an epithelial cell-derived neoplasia (epithelial carcinoma), a basal cell carcinoma, an adenocarcinoma, a gastrointestinal cancer, a lip cancer, a mouth cancer, an esophageal cancer, a small bowel cancer, a stomach cancer, a colon cancer, a liver cancer, a bladder cancer, a pancreas cancer, an ovary cancer, a cervical cancer, a lung cancer, a breast cancer, a skin cancer,

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a squamus cell cancer, a basal cell cancer, a prostate cancer, a renal cell carcinoma, a cancerous tumor, a growth, a polyp, an adenomatous polyp, a familial adenomatous polyposis or a fibrosis resulting from radiation therapy.

- 49. (Withdrawn) The method of claim 47, wherein the central nervous system disorder is cortical dementia, Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, senile dementia, or central nervous system damage resulting from stroke, ischemia or trauma.
- 50. (Withdrawn) A method for inhibiting platelet aggregation in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 29 or 37.
  - 51. (Withdrawn) A kit comprising at least one compound of claim 1.
- 52. (Withdrawn) The kit of claim 51, further comprising (i) at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase; (ii) at least one therapeutic agent; or (iii) at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase and at least one therapeutic agent.
- 53. (Withdrawn) The kit of claim 52, wherein the at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase; the at least one therapeutic agent; or the at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase and at least one therapeutic agent; are in the form of separate components in the kit.
  - 54. (Withdrawn) A kit comprising the composition of claim 14, 29 or 37.
- 55. (Currently Amended) A compound selected from the group consisting of 1-(1-cyclohexyl-5 (4 (methylsulfonyl)phenyl)pyrazol-3 yl) 4 hydroxybutan-1 one; 1-(3-((1Z) 4 (hydroxy)but-1 enyl) 1 cyclohexylpyrazol-5 yl 4 methylsulfonyl)benzene; 4-(3-((3 hydroxypropoxy)methyl) 1 phenylpyrazol-5 yl) 1 (methylsulfonyl)benzene;

1-(3-(difluoro(3-hydroxypropoxy)methyl)-1-phenylpyrazol-5-yl)-4-(methylsulfonyl)benzene; 1-(1-(4-chlorophenyl)-3-((3-hydroxypropoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl) benzene; 1-(3-((3-hydroxypropoxy)methyl)-1-(4-methylphenyl)pyrazol-5-yl)-4-(methylsulfonyl)benzene; 1-(3-((3-hydroxypropoxy)methyl)-1-(4-(trifluoromethyl)phenyl)pyrazol-5-yl)-4-(methylsulfonyl)benzene; 1 (3 ((3 hydroxypropoxy)methyl) 1 (4 methoxyphenyl)pyrazol 5 yl) 4 (methylsulfonyl) benzene: 1 (3 ((1Z) 4 (hydroxy)but 1 enyl) 1 phenylpyrazol 5 yl) 4 methylsulfonyl)benzene; 4 hydroxy-1-(1-(4 methylphenyl) 5-(4 (methylsulfonyl)phenyl)pyrazol 3-yl)butan-1-one; 1-(1-(4-fluorophenyl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 hydroxybutan-1-one; 1-(1-(4-fluorophenyl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 hydroxybutan-1-one; 1-(1-(4-fluorophenyl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 hydroxybutan-1-one; 1-(1-(4-fluorophenyl)pyrazol-3-yl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 hydroxybutan-1-one; 1-(1-(4-fluorophenyl)pyrazol-3-yl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 hydroxybutan-1-one; 1-(1-(4-fluorophenyl)pyrazol-3-yl) 5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 6 hydroxybutan-1-one; 1-(1-(4-fluorophenyl)pyrazol-3-yl) 6 hydroxybutan-1-(1-(4-fluorophenyl)pyrazol-3-yl) 6 hydroxybutan-1-one; 1-(1-(4-fluorophenyl)pyrazol-3-yl) 6 hydroxybutan-1-one; 1-(1-(4-fluoroph bromophenyl) 5 (4 (methylsulfonyl)phenyl)pyrazol 3 yl) 4 hydroxybutan-1 one; 1 (1 cyclohexyl-3-((2-hydroxyethoxy)methyl)pyrazol 5-yl) 4 (methylsulfonyl)benzene; 1-(1-cyclohexyl-3-((3-hydroxypropoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl)benzene; 1-(1-cyclohexyl-3-((3-(hydroxymethyl)phenoxy)methyl)pyrazol-5-yl) 4-(methylsulfonyl)benzene; 1-(1-(4-fluorophenyl)-3-((3-hydroxypropoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl)benzene; 1 (3 ((3-hydroxybutoxy)methyl)-1-phenylpyrazol-5-yl) 4 (methylsulfonyl)benzene; 1-(3-((1E) 4-(hydroxy)but-1-enyl) 1-cyclohexylpyrazol-5-yl) 4-methylsulfonyl)benzene; 1-(1-cyclohexyl-5-(4-(methylsulfonyl)phenyl)-pyrazol-3-yl)-6-hydroxyhexan-1-one; 4 hydroxy 1 (5 (4 (methylsulfonyl)phenyl) 1 (4 (trifluoromethyl) phenyl)pyrazol 3 yl) butan 1 one; 4-hydroxy-1 (1 (4-methoxyphenyl) 5 (4-(methylsulfonyl)phenyl) pyrazol-3-yl) butan-1-one; 4 (3 ((1E) 3 hydroxyprop 1 enyl) 1 cyclohexylpyrazol-5-yl) 1 (methylsulfonyl) benzene; 1-(1 cyclohexyl-3-(((2-hydroxyethyl)amino)methyl)pyrazol 5-yl) 4-(methylsulfonyl)benzene; 4-(3-(4-hydroxybutanoyl)-5-(4-(methylsulfonyl)phenyl)pyrazolyl) benzenecarbonitrile; 4-(1-cyclohexyl-3-(4-hydroxybutanoyl)pyrazol-5-yl)benzenesulfonamide; 1 (1 (4 chloroophenyl) 5 (4 (methylsulfonyl)phenyl)pyrazol 3 yl) 4 hydroxybutan 1 one; (1-cyclohexyl-5-(4-(methylsulfonyl)phenyl)pyrazol-3-yl)-N-(2-hydroxyethyl)carboxamide;

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(1-cyclohexyl-5-(4-(methylsulfonyl)phenyl)pyrazol-3-yl) N-(3-hydroxypropyl) carboxamide;
1-(1-cyclooetyl-3-((nitrooxy)methyl)pyrazol-5-yl) 4-methylsulfonyl)benzene;
1-(1-cycloheptyl-3-((nitrooxy)methyl)pyrazol 5-yl) 4-(methylsulfonyl)benzene; 1-(1-
cyclohexyl-5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl) 4 (nitrooxy)butan-1-one
1-(3-((1Z) 4-(nitrooxy)but-1-enyl)-1-cyclohexylpyrazol-5-yl)-4-(methylsulfonyl) benzene;
4-(3-((3 (nitrooxy)propoxy)methyl)-1-phenylpyrazol-5-yl)-1-(methylsulfonyl)benzene;
1 (3 (difluoro(3-(nitrooxy)propoxy)methyl) 1-phenylpyrazol 5-yl) 4 (methylsulfonyl)
benzene:
1 (1 (4 chlorophenyl) 3 ((3 (nitrooxy)propoxy)methyl)pyrazol 5 yl) 4 (methylsulfonyl)
benzene:
1-(1-(4-methylphenyl)-3-((3-(nitrooxy)propoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl)
benzene:
4 (methylsulfonyl) 1 (3 ((3 (nitrooxy)propoxy)methyl) 1 (4 (trifluoromethyl)phenyl)pyrazol 5
yl)benzene;
1-(1 (4 methoxy 3 nitrophenyl) 3 ((3 (nitrooxy)propoxy)methyl)pyrazol 5-yl) 4-
(methylsulfonyl) benzene;
1-(3-((1Z) 4-(nitrooxy)but-1-enyl)-1-phenylpyrazol-5-yl)-4-(methylsulfonyl)benzene;
1-(3-((1E) 4 (nitrooxy)but 1 enyl) 1 phenylpyrazol 5-yl) 4 (methylsulfonyl)benzene;
1-(1-(4-methylphenyl)-5 (4 (methylsulfonyl)phenyl)pyrazol-3-yl)-4 (nitrooxy)butan-1-one;
1-(1-(4-fluorophenyl)-5-(4-(methylsulfonyl)phenyl)pyrazol-3-yl)-4-(nitrooxy) butan-1-one
1 (1 (4-bromophenyl) 5 (4-(methylsulfonyl)phenyl)pyrazol 3 yl) 4 (nitrooxy) butan 1-one;
1-(1-cyclohexyl 3-((2-(nitrooxy)ethoxy)methyl)pyrazol 5-yl) 4 (methylsulfonyl)benzene;
1-(1-cyclohexyl-3-((3-(nitrooxy)propoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl)benzene;
1-(1-cyclohexyl-3-((3-((nitrooxy)methyl)phenoxy)methyl)pyrazol-5-yl) 4 (methylsulfonyl)
benzene:
1-(1-(4-fluorophenyl)-3-((3-(nitrooxy)propoxy)methyl)pyrazol-5-yl)-4-(methylsulfonyl)
benzene:
4 (methylsulfonyl) 1 (3 ((3 (nitrooxy)butoxy)methyl) 1 phenylpyrazol 5 yl)benzene;
1-(3-((1E) 4-(nitrooxy)but-1-enyl)-1-cyclohexylpyrazol-5-yl)-4-(methylsulfonyl)benzene;
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1-(1-cyclohexyl-5 (4-(methylsulfonyl)pyrazol-3-yl)-6-(nitrooxy)hexan-1-one; 1-(5-(4-(methylsulfonyl)phenyl)-1-(4-(trifluoromethyl)phenyl)pyrazol-3-yl)-4-(nitrooxy)butan-1-one; 1-(1-(4-methoxyphenyl) 5-(4-(methylsulfonyl)phenyl)pyrazol 3-yl-4-(nitrooxy) butan-1-one; 4-(1-cyclohexyl-3-(2-(nitrooxy)ethyl)pyrazol-5-yl)-1-(methylsulfonyl)benzene; 4-(1-cyclohexyl 3-(3-(nitrooxy)propyl)pyrazol-5-yl)-1 (methylsulfonyl)benzene; 1 (5 (4 (methysulfonyl)phenyl) 1 (2 pyridyl)pyrazol 3 yl) 2 (nitrooxy)ethan 1 one; 4 (1-(4-methoxyphenyl)-3 ((3-(nitrooxy)propoxy)methyl)pyrazol-5-yl)-1 (methylsulfonyl) benzene; 4 (1 (4 methyl 3 nitrophenyl) 3 ((3 (nitrooxy)propoxy)methyl)pyrazol 5 yl) 1 (methylsulfonyl)benzene; 1 (3 ((1E) 3 (nitrooxy)prop-1-enyl)-1-cyclohexylpyrazol-5-yl) 4 (methylsulfonyl) benzene; 4-(5-(4-(methylsulfonyl)phenyl)-3-(4-(nitrooxy)butanoyl)pyrazolyl) benzenecarbonitrile; 4-(1-cyclohexyl-3-(4-(nitrooxy)butanoyl)pyrazol-5-yl)benzenesulfonamide; 1-(1 (4 chlorophenyl)-5-(4 (methylsulfonyl)phenyl)pyrazol-3-yl)-4 (nitrooxy) butan 1 one; (1 cyclohexyl-5-(4-(methylsulfonyl)phenyl)pyrazol 3-yl) N-(2 (nitrooxy)ethyl)carboxamide; (1-cyclohexyl-5-(4-(methylsulfonyl)phenyl)pyrazol-3-yl)-N-(3(nitrooxy) propyl)carboxamide; 3-(nitrooxy)propyl 4-(5-(4-(methylsulfonyl)phenyl) 1-(4-(trifluoromethyl)-phenyl)pyrazol 3vl)butanoate; 4-(3-((3-hydroxypropoxy)methyl)-5-(4-methylphenyl)pyrazolyl)benzenesulfonamide; 1 (3 ((1Z) 4 hydroxybut 1 enyl) 5 (3 pyridnyl)pyrazolyl) 4 (methylsulfonyl)benzene; 4 (5 (4 chlorophenyl) 3 ((3 hydroxypropoxy)methyl)pyrazolyl)benzenesulfonamide; 4-(3-((3-hydroxypropoxy)methyl)-5-phenylpyrazolyl)benzenesulfonamide; 4-(5-(4-chlorophenyl) 3-((3-hydroxypropoxy)methyl)pyrazolyl) benzenesulfonamide; 4-(5-(4-methylphenyl) 3-((3-(nitrooxy)propoxy)methyl)pyrazolyl)benzenesulfonamide; 1-(3-((1Z) 4-(nitrooxy)but-1-enyl)-5-(3-pyridyl)pyrazolyl)-4-(methylsulfonyl)benznene; 4 (5 (4 chlorophenyl) 3 ((3 (nitrooxy)propoxy)methyl)pyrazolyl)benzenesulfonamide; 4-(3-((3 (nitrooxy)propoxy)methyl)-5-phenylpyrazolyl)benzenesulfonamide; 4-(5-(chlorophenyl)-3-((3-(nitrooxy)propoxy)methyl)benzene-sulfonamide

- 4 (5 (3 hydroxypropoxy)methyl) 3 phenylisoxazol 4 yl)benzenesulfonamide;
- 4-(5-(2-hydroxyethoxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfonamide;
- 4-(5-((2,2-difluoro-3-hydroxypropoxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfonamide <u>or a</u> pharmaceutically acceptable salt thereof;
- 4-(3-phenyl-5-(2,2,3,3-tetrafluoro-4-hydroxy)methyl)isoxazol-4-yl)benzenesulfonamide <u>or a pharmaceutically acceptable salt thereof;</u>
- 4-(5-((2,2,3,3,4,4-hexafluoro-5-hydroxypentyloxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof;
- 4-(5-((2- ((2-hydroxyethyl)sulfonyl)ethoxy)methyl)-3-phenylisoxazol-4-yl) benzenesulfonamide <u>or a pharmaceutically acceptable salt thereof;</u>
- 4-(5-(3-nitrooxy)propoxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfonamide <u>or a pharmaceutically acceptable salt thereof;</u>
- 4-(5-(2-nitrooxy)ethoxy)methyl-3-phenylisoxazol-4-yl)benzenesulfonamide <u>or a pharmaceutically acceptable salt thereof;</u>
- 4-(5-((2,2-difuoro-3-(nitrooxy)propoxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfoamide <u>or a pharmaceutically acceptable salt thereof;</u>
- 4-(3-phenyl-5-(2,2,3,3-tetrafluoro-4-hydroxy)methyl)isoxazol-4-yl)benzenesulfonamide;
- 4-(3-phenyl-5-{[2,2,3,3-tetrafluoro-4-(nitrooxy)butoxy]methyl}isoxazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof; and
- 4-(5-((2,2,3,3,4,4-hexafluoro-5-(nitrooxy)pentyloxy)methyl)-3-phenylisoxazol-4-yl)benzenesulfonamide or a pharmaceutically acceptable salt thereof; and
- 4-(5-((2-(nitrooxy)ethyl)sulfonyl)ethoxy)methyl)-3-phenylisoxazol-4-yl) benzenesulfonamide <u>or a pharmaceutically acceptable salt thereof.</u>;

## or a pharmaceutically acceptable salt-thereof.

- 56. (Original) A composition comprising at least one compound of claim 55 and a pharmaceutically acceptable carrier.
- 57. (Original) The composition of claim 56, further comprising (i) at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase; (ii) at least one

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therapeutic agent; or (iii) at least one compound that donates, transfers or releases nitric oxide, induces the production of endogenous nitric oxide or endothelium-derived relaxing factor, or is a substrate for nitric oxide synthase and at least one therapeutic agent.

- 58. (Withdrawn) A kit comprising at least one compound of claim 55.
- 59. (New) A compound of Formula (III) or a pharmaceutically acceptable salt thereof:

$$R_2$$
 $R_5$ 
 $R_1$ 
 $R_1$ 

wherein:

R<sub>5</sub> is:

(a) 
$$-(C(R_4)(R_4))_k-Y-(C(R_4)(R_4))_k-B-(C(R_4)(R_4))_k-O-V$$
;

(b) 
$$-(C(R_4)(R_4))_k-Y-(C(R_4)(R_4))_k-D-(C(R_4)(R_4))_k-O-V;$$

(c) 
$$-C(Z)-(C(R_4)(R_4))_k-Y-(C(R_4)(R_4))_k-O-V$$
;

(d) 
$$-(C(R_4)(R'_4))_k$$
-Y-W-Q- $C(R_4)(R'_4))_k$ -O-V;

(e) 
$$-C(Z)-W-Q-(C(R_4)(R'_4))_k-O-V$$
;

(f) 
$$-(C(R_4)(R_4))_p$$
-E-N(R<sub>i</sub>)-O-W-Q-(C(R<sub>4</sub>)(R<sub>4</sub>)<sub>k</sub>-O-V;

$$(g) - (C(R_4)(R_4))_p - E - N(R_i) - O - (C(R_4)(R_4))_k - O - V;$$

(h) 
$$-(C(R_4)(R_4))_p - N(R_i) - O - (C(R_4)(R_4))_k - O - V;$$

(i) 
$$-(C(R_4)(R_4))_p$$
-O-N(R<sub>i</sub>)- $(C(R_4)(R_4))_k$ -O-V;

(j) 
$$-(C(R_4)(R_4))_p$$
- O-N(R<sub>i</sub>)-E-(C(R<sub>4</sub>)(R'<sub>4</sub>)<sub>k</sub>-O-V; or

$$(k) - (C(R_4)(R'_4))_p - O-N(R_i) - E-W-Q-(C(R_4)(R'_4)_k - O-V;$$

B is -C(Z)-, -Y- or a covalent bond;

D is 
$$-S(O)_0$$
 or  $-N(R_a)(R_i)$ ;

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 $R_1$  is  $-S(O)_2$ -CH<sub>3</sub> or  $-S(O)_2$ -NH<sub>2</sub>;

R<sub>1</sub> at each occurrence is independently a hydrogen, a halogen, a methyl or CH<sub>2</sub>OH;

 $R_2$  is a substituted lower alkyl group, a cycloalkyl group, an aryl group or a heterocyclic ring;

R<sub>4</sub> and R'<sub>4</sub> at each occurrence are independently a hydrogen, a halogen, a lower alkyl group or an alkoxy group; or R<sub>4</sub> and R'<sub>4</sub> taken together with the carbon atom to which they are attached are a substituted lower alkyl, a cycloalkyl group, an aryl group or a heterocyclic ring;

V is -NO<sub>2</sub>, or a hydrogen; with the proviso that when V is hydrogen and R<sub>5</sub> is variable (a), then at least one of R<sub>4</sub> and R'<sub>4</sub> must be a halogen;

Y at each occurrence is independently an oxygen,  $-S(O)_0$  or  $-N(R_a)R_i$ ;

Z is an oxo, a thial, an oxime or a hydrazone;

Q is Y or a covalent bond;

W at each occurrence is independently an aryl group, an alkylaryl group, a heterocyclic ring, or an alkylheterocyclic ring;

E is 
$$-C(O)$$
 or  $-S(O)_o$ ;

Ra is a lone pair of electron, a hydrogen, or a lower alkyl group;

 $R_i$  is a hydrogen, an alkyl, an aryl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarboxylic ester, an arylcarboxylic ester, an alkylcarboxamido, an arylcarboxamido, an alkylaryl, an alkylsulfinyl, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfinyl, an arylsulfonyl, arylsulphonyloxy, a sulfonamido, a carboxamido, a carboxylic ester, an aminoalkyl, an aminoaryl,  $-(C(R_4)(R'_4))_n$ -O-V, a bond to an adjacent atom creating a double bond to that atom, or  $-(N_2O_2-)^{-\bullet}M^+$ , wherein  $M^+$  is an organic or inorganic cation;

o is an integer from 0 to 2;

k is an integer from 1 to 6;

p at each occurrence is independently an integer from 0 to 10; and

n at each occurrence is independently an integer from 2 to 10.